Xixi Wu

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SHORT BIO

Xixi Wu is a first-year Ph.D. student at The Chinese University of Hong Kong. She received her B.S. and M.S. in Computer Science from Fudan University in 2021 and 2024, respectively.

Her research interests lie in the intersection of **Graph Learning and Large Language Models (LLMs)**. Specifically, she focuses on integrating Graph Learning with LLMs to enhance their reasoning and planning capabilities in graph-related applications, such as task planning in autonomous agents.

EDUCATION

- **The Chinese University of Hong Kong**   *Aug. 2024 -*
  Ph.D. in Department of Systems Engineering and Engineering Management   Hong Kong SAR
    ◦ Advisor: **Prof. Hong Cheng**, Laboratory: **Database Group @ CUHK**

    ◦ **Hong Kong PhD Fellowship**

- **Fudan University**   *Sept. 2021 - Jun. 2024*
  M.S. in Computer Science   Shanghai, China
    ◦ Advisors: **Prof. Yangyong Zhu** and **Prof. Yun Xiong**

    ◦ **National Scholarship, Outstanding Graduate Student in Shanghai**

- **Fudan University**   *Sept. 2017 - Jun. 2021*
  B.S. in Computer Science   Shanghai, China

SELECTED PUBLICATIONS   LLM=LARGE LANGUAGE MODELS, DM=DATA MINING, RS=RECOMMENDER SYSTEMS

[*: Equal Contribution, ¶: Students I Mentored]

[LLM] A Comprehensive Analysis on LLM-based Node Classification Algorithms.
Xixi Wu, Yifei Shen, Fangzhou Ge, Caihua Shan, Yizhu Jiao, Xiangguo Sun, and Hong Cheng.
Long Paper. In *arXiv Preprint 2024*. *Benchmark Includes 10 Datasets and 10 Algorithms.*

[LLM] Can Graph Learning Improve Planning in LLM-based Agents?
Xixi Wu*, Yifei Shen*, Caihua Shan, Kaitao Song, Siwei Wang, Bohang Zhang, Jiarui Feng, Hong Cheng, Wei Chen, Yun Xiong, and Dongsheng Li.
Main Track Long Paper. In *NeurIPS 2024*. *100+ GitHub Stars*

[DM] ProCom: A Few-shot Targeted Community Detection Algorithm.
Xixi Wu, Kaiyu Xiong, Yun Xiong, Xiaoxin He, Yao Zhang, Yizhu Jiao, and Jiawei Zhang.
Research Track Long Paper. In *KDD 2024*.

[RS] ConsRec: Learning Consensus Behind Interactions for Group Recommendation.
Xixi Wu, Yun Xiong, Yao Zhang, Yizhu Jiao, Jiawei Zhang, Yangyong Zhu, and Philip S. Yu.
Research Track Long Paper. In *WWW 2023*. *Oral*

[RS] Dual Intents Graph Modeling for User-centric Group Discovery.
Xixi Wu, Yun Xiong, Yao Zhang, Yizhu Jiao, and Jiawei Zhang.
Research Track Long Paper. In *CIKM 2023*.

[DM] CLARE: A Semi-supervised Community Detection Algorithm.
Xixi Wu, Yun Xiong, Yao Zhang, Yizhu Jiao, Caihua Shan, Yiheng Sun, Yangyong Zhu, and Philip S. Yu.
Research Track Long Paper. In *KDD 2022*. *30+ GitHub Stars, ∼ 40 Citations*

[DM] DDIPrompt: Drug-Drug Interaction Event Prediction based on Graph Prompt Learning.
Yingying Wang¶, Yun Xiong, Xixi Wu, Xiangguo Sun, and Jiawei Zhang.
Research Track Long Paper. In *CIKM 2024*.

[DM] Towards Adaptive Neighborhood for Advancing Temporal Interaction Graph Modeling.
Siwei Zhang¶, Xi Chen, Yun Xiong, Xixi Wu, Yao Zhang, Yongrui Fu, Yinglong Zhao, and Jiawei Zhang.
Research Track Long Paper. In *KDD 2024*.

[DM] Graph Prompt Learning: A Comprehensive Survey and Beyond.
Xiangguo Sun, Jiawen Zhang, Xixi Wu, Hong Cheng, Yun Xiong, and Jia Li.
Survey Paper. In *arXiv Pre-print 2023*. *300+ GitHub Stars, ∼ 50 Citations*

INTERNSHIP EXPERIENCE

- **Microsoft Research Asia [🌐]** *Feb. 2024 - Jun. 2024*
  Research Intern @ Shanghai AI/ML Group Shanghai, China
    ◦ Mentors: Dr. Yifei Shen and Dr. Caihua Shan
    ◦ Conducted research on graph learning to enhance task planning, systematically applying various graph learning methods such as graph prompts, graphsearch, graph language models, etc, to improve the planning capabilities of language agents.
    ◦ Designed a GNN-based method that demonstrates SOTA performance, strong efficiency, and is orthogonal to LLM fine-tuning and prompt engineering for task planning in language agents.

ACADEMIC SERVICE

- **Conference PC Member / Reviewer:** Graph Foundation Model Workshop@WWW 2024, NeurIPS 2024, ICLR 2025, KDD 2024 - 2025, ICML 2025
- **Journal Reviewer:** IEEE Transactions on Knowledge and Data Engineering (**TKDE**), Transactions on Machine Learning Research (**TMLR**)

SELECTED AWARDS

- **NeurIPS Top Reviewer (Top 0.8%)** *2024*
- **Hong Kong PhD Fellowship**, Hong Kong SAR *2024*
- **National Scholarship for Graduate Student (Top 1%)**, Ministry of Education, China *2022 & 2023*
- **WWW 2023 Student Travel Award** *2023*
- **2nd Class Scholarship for Outstanding Student**, Fudan University *2018 & 2021*
- **2nd Prize of Undergraduate Mathematical Contest in Modeling**, Shanghai, China *2019*
- **1st Prize in National Olympiad in Mathematics in Provinces**, Jiangsu, China *2016*